

Materials of the Botanical Research towards the Flora of Micronesia (XIV)*

Takahide HOSOKAWA

細川隆英 : 南洋群島植物探究資料 (XIV)

Pandanaceae

Freycinetia mariannensis MERR. (§ *Oligostigma*) in Philipp. Journ. Sci. IX. (1914) Bot. p. 48.

Freycinetia ponapensis MARTELLI in Bot. Mag. Tokyo XLVIII. (1934) p. 129, **Syn. nov.**

Freycinetia carolinensis KANEHIRA in Bot. Mag. Tokyo XLIX. (1935) p. 186, f. 17, **Syn. nov.**

HAB. Marianne; Guam, Rota (7559 ! 7634 !), Saipan (6609 !), Anatahan (7866 !, Sarigan, Alamagan, (7928 !), Pagan and Agrigan. Caroline : Palau (R. KANEHIRA no 2359 !), Truk (8273 !), Ponape (5975 a ! 5671 !), and Kusaie (6437 !).

DISTRIB. Caroline and Marianne.

Vernacular name in Truk, "Appa."

The species new to Truk.

var. **microsyncarpia** HOSOKAWA, var. nov.

Syncarpium parvum 3.7–4 cm longum, 2–2.5 cm crassum, pedicellis tenuibus ca. 2.5 cm longis, fructibus ca. 8 mm longis.

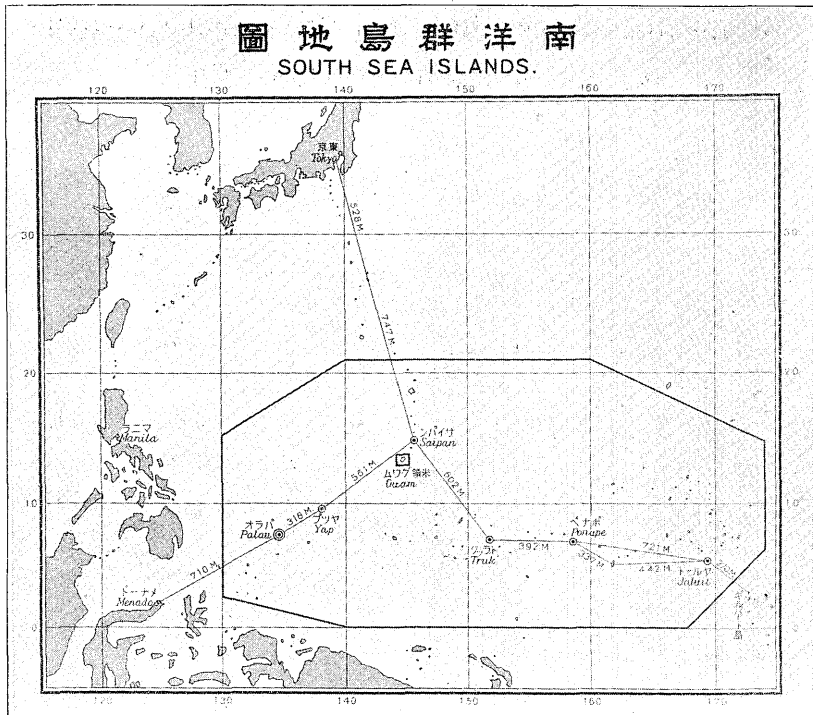
HAB. Caroline : Ponape, in a thicket at the top of Mt. Nanaraut (T. HOSOKAWA, no. 5975 a ! VIII. 24, 1933).

E.D. MERRILL 氏ハ Guam 島ノ植物相ヲ研究スルニアタリ、Guam Experiment Station ニヨル 1912 年ノ採集品 197 號ヲ研究ノ結果 Philippines ニ生育スル *Freycinetia maxima* MERR. ニ近似セル別種トシテ *Freycinetia marian-*

* Continued from "the Transactions of the Natural History Society of Formosa, Vol. XXVI. no 153. (1936) p. 244."

The expense of the exploration to Micronesia has partly been defrayed by the Subsidy granted by the Foundation for the Promotion of Scientific and Industrial Research of Japan.

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nensis MERR. ナル種名ヲ與ヘ發表シタ。其ノ後金平亮三氏ト 1935 年ニ本種ガ Saipan 島及ビ Alamagan 島ニモ生育スルコトヲ公表シタ。筆者モ 1934 年 Marianne 群島ノ植物ヲ探索スルニアタリ本種ハ Rota, Saipan, Anatahan, Sarigan, Alamagan, Pagan 及ビ Agrigan ノ各島嶼ニ生育セルコトヲ確メルコトガ出來タ。

以上トハ全然別ニ金平亮三氏ハ 1935 年ニ Palau カラ *Freycinetia carolinensis* KANEHIRA ナル別種ヲ公表シ、“This is near *Freycinetia mariannensis* MERR., but it is distinguished by its prominently tessellate leaves” トイフ理由デ立派ナ圖ヲ示シ、*Freycinetia mariannensis* MERR. ヨリ區別シ、別種トシテ認メテキル。

コノ區別點トナツタ特徴ニ就イテ見ルニ MERRILL 氏ガ 1914 年ニ發表セル原記載文ヲ見ルト “....., the transverse reticulations none or obscure,” トアル。然ルニ小生ガ Marianne 群島デ採集セル *Freycinetia mariannensis* MERR. ハソノ葉面ニ現ハレル tessellation ノ明瞭、不明瞭ノ程度

が個體デモ随分變化ガアリ、生育地方ノ關係デモ變ツテキル。Marianne 群島殆ンド全體ニ分布スルコノ種ト、Palau ノ *Freycinetia carolinensis* KANEHIRA トハ葉面ノ tessellation 及ビ他ノ特徴カラ見テモ、特ニ別種トシテ區別スル必要ヲ認メ得ナイ。

又一方、Ponape 島カラ 1934 年ニ *Freycinetia ponapensis* MARTELLI ガ報ゼラレテキル。コノ種ニ關シテハ、原記載文ト小生ガ同島デ採集シタ標品及ビ Marianne 群島デ採集シタ標品トヲ照合シタ結果、Ponape 島ノモノモ *Freycinetia mariannensis* MERR. ニアタルモノト思ハレル。1933 年夏ニ小生ガ Kusaie 島デ採集シタモノモ葉ダケノ標品デハアルガ、ヤハリ同種ト思ハレル。尙今夏 (1936 年) 同種ガ Truk 島ニモ生育シテキルコトヲ確メ得タ。



Fig. 1. *Coelococcus amicarum* (WENDL.) WARB., on the islet of Fefan in Truk.

Hydrocharitaceæ

Blyxa muricata Koipz. (§ *Diplosiphon*) in Tokyo Bot. Mag. XXXI. (1917) p. 258.

?*Blyxa octandra* (non PLANCH.) KANEHIRA, Enum. Micron. Pl. (1935) p. 265, pro parte.

HAB. Caroline: Palau, islet Babeldaob, in fresh water pond (T. Hosokawa, nos. 6857 ! & 7386 !); Ponape, in shallow fresh water streamlet (T. Hosokawa, no. 5573 !); Truk, islet Trowasi (T. Hosokawa, no. 8361 !) islet Tol (T. Hosokawa, no. 8268 !).

DISTRIB. Japan proper (prov. Mikawa), Liukiu and Carolines.

Palmae

Coelococcus amicarum (Wendl.) Warb. in Ber. Deutsch. Bot. Gesellsch. XIV. (1896) S. 140 [non W.F. Wight (1905)]; W. F. Wight ex Safford in Contrib. U.S. Nat. Herb. IX. (1905) p. 244; Kanehira in Bot. Mag. Tokyo XLV. (1931) p. 274; Fl. Micron. (1933) p. 74; Enum. Micron. Pl (1935) p. 283.

Sagus amicarum Wendl. in Bot. Zeit. XXXVI. (1878) S. 115.

Coelococcus carolinensis Dingl. in Bot. Centralbl. XXXIII. (1887) S. 349; K. Schum. & C. Lauterb. Fl. Deut. Schutzg. Süds (1901) S. 606.

HAB Caroline: Endemic on Ponape and Truk. The species occurs characteristically on the neighbouring places of mangrove swamps and occasionally on swampy places of upper mountain regions.

さうげやしノ學名ハ、W.F. WIGHT ヨリモ九年以前ニ O. Warburg ニヨツテ新組合セテ發表シテキルノデコレヲ採用スルコトニシタ。

Araceae

Scindapsus carolinensis Hosokawa, sp. nov.

Planta ad arbores alte scandens vel ad truncos arborum vel ad rupes repens. Caulium internodium ca. 2 cm longum, 1 cm crassum. Foliorum petiolus ca. 31 cm longus, vaginatus, supra vaginam 4 cm longus, ad apicem petioli geniculatus. Lamina oblique oblongo-ovata, integra, apice acuminata, basi obtusa, ca. 33 cm longa, ca. 15 cm lata, utrinque glabra, nervis lateralibus numerosis, tenuibus, angulo ca. 65 a costa patentibus, parallelis, versus marginem arcuatim adscendentibus. Pedunculus ca. 7 cm longus. Spatha crassa carnea, glabra, ca. 20 cm longa, acuta. Spadix floriter sessilis, cylindricus, ca. 15 cm longus et 1.5 cm crassus, sursum paulum attenuatus, apice acutus. Stamina 4, filamentis latiusculis brevissimis, antheris dithecis 2 mm longis. Pistilla subprismatica, 5 mm longa, vertice hexagono vel pentagono, stigmate oblongo, subelevato, coronata. Ovarium uniloculare, uniovulatum;

ovulum anatropum funiculo brevi fundo cavitatis affixum.

HAB. Caroline: Truk, on rocky sea-shore at Amatyan in the island of Tol (T. HOSOKAWA, no. 8308! VII. 26, 1936—Type in *Herb. Taihoku Imper. Univ.*).

The genus new to Micronesia. Vernacular name, "Appuap." In Truk, this plant occurs also on the islets of Wara, Fefan and Trowasi.

此ノ屬ノ植物ハ Borneo, Malay Peninsula, Sumatra 方面即チ Sunda-land ニ豊富デアル。コレニ反シテ Papua-land 方面ニハ比較的ニ少イ。ミクロネシアニハ未ダ知ラレテキナカツタ屬デア
ル。



Fig. 2. *Scindapsus carolinensis* HOSOKAWA, on *Calophyllum inophyllum* L. at upper altitudes of the islet of Trowasi in Truk.

Raphidophora trukensis HOSOKAWA, sp. nov.

Planta ad truncos arborum repens. Foliorum petiolus ca. 33 cm longus, supra tota longitudine canaliculatus, ad apicem geniculatus, vagina denique fibrosa. Lamina late elliptica, 55 cm longa, 36 cm lata, apice obtusa, basi truncata, utrinque glabra, usque ad costæ alam ca. 1-1.5 cm latam profunde pinnatifida, laciniis utrinque 5, oblique oblongis ca. 20 cm longis 6 cm latis apice oblique truncatis, nervis lateralibus I. in quoque lacinia sæpius 3 raro 4, angulo ca. 60 a costa patentibus, nervis II. ca. 5 vel 6 inter primarios interjectis tenuioribus subparallelis, venis inter secundarios numerosissimis fere reticulatis. Pedunculus ad summum caulis 2-5 glomeratus 7-12 cm longus. Spatha naviculæformis, crasse carnosæ, glabra, acuminata, ca. 18 cm longus. Spadix sessilis, cylindricus, 10-12 cm longus, ca. 1.8 cm crassus, apice rotundus. Stamina 4: filamenta membranacea, pistillo æquilonga, valde dilatata, basin versus angustata, 5 mm longa, summum ca. 1.3 mm lata, antheris ovatis

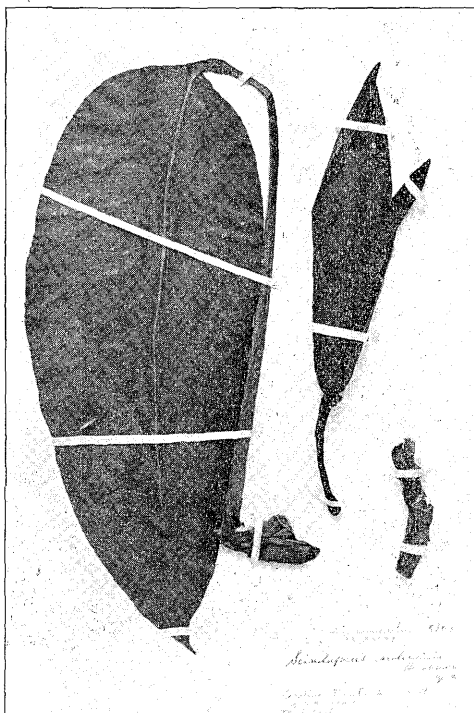


Fig. 3. *Scindapsus carolinensis* HOSOKAWA, sp. nov. Photograph of the type specimen.

($\times 1/5$)

dithecis ea. 1.2 mm longis. Pistilla hexagono-prismatica, 5 mm longa, ca. 2.5 mm crassa, vertice truncato hexagono, sub-2-locularia, loculis pluri-ovulatis, stigmati lineari subimmerso.

HAB. Caroline: Truk, epiphytic on the trunk of *Artocarpus communis* near Örrip, at about 200 m above the sea-level (T. HOSOKAWA, no. 8334! VII. 2), 1936—Type in *Herb. Taihoku Imper. Univ.* The genus new to Truk. Vernacular name, “Nûkarifau.”

During my exploration to Truk in the summer of 1936, I collected the present proposed species on the mountain region of Wara and Tol.

ミクロネシアデハコノ属ハ Palau カラ二種ガ知ラレテキタ。Truk デハ初メテノモノデアル。

Liliaceæ

Dianella carolinensis LAUTEB. in ENGL. Bot. Jahrb. L. (1913) S. 293.

Dianella ensifolia (non RED.) VOLKENS in ENGL. Bot. Jahrb. XXXI. (1901) S. 460; KANEHIRA Enum. Micron. Pl. (1935) p. 288, *pro parte*.

HAB. Caroline: Palau, islet Babeldaob. on a grassland near the foot of Mt. Luis-almonogui (T. HOSOKAWA, no. 6818! IX. 16, 1933), islet Babeldaob, on a grassland on Mt. Agade (T. HOSOKAWA, no. 7065! IX. 20, 1933).

DISTRIB. The species is confined to Yap and Palau.

Yap 及ビ Palau =産スル *Dianella* sp. ハ C. LAUTERBACH ノ説ノ如ク確カニ *Dianella ensifolia* RED. トハ別種デアル。



Fig. 4. *Raphidophora trukensis* Hosokawa on *Artocarpus communis* Forst. at middle altitudes of the islet of Tol in Truk.



Fig. 5. *Raphidophora trukensis* Hosokawa sp. nov. Photograph of the type specimen. $\times 1/5$

Palau ハ本種ノ新産地デアル。

Taccaceae

Tacca Rumphii Schauer in Nov. Act. Nat. Cur. XIX. suppl. I. (1843) p. 442 ; Limpricht f. in Engl. Pfl.-Reich Heft 92 (1928) S. 74.

Tacca palmata (non Bl.) Hosokawa, in Trans. Nat. Hist. Soc. Formos. XXV. (1935) p. 266.

HAB. Caroline : Palau (non. 6874!).

DISTRIB. Celebes, Moluccas, Philippines and Palau.

筆者ガカツテ *Tacca palmata* Bl. ニ同定シタ Palau 産ノ *Tacca* sp. ハ *Tacca Rumphii* Schauer デアツタ。此處ニ訂正スル。

Musaceae

Musa Tikap Warb. in Tropenpfl. (1903) S. 34; Winkler in Engl. & Prant-

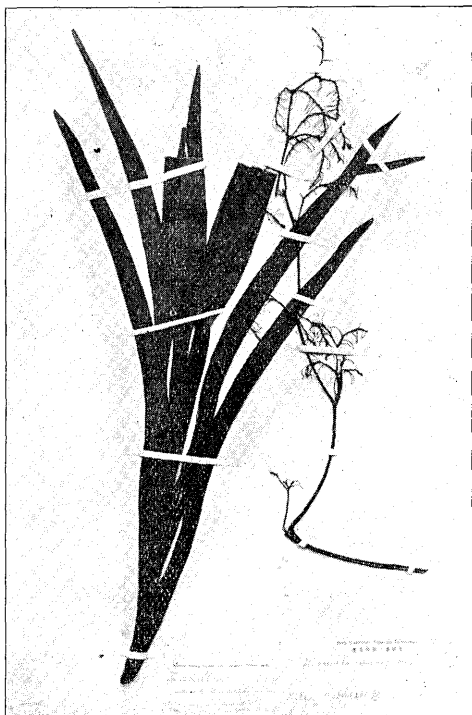


Fig. 6. *Dianella carolinensis* LAUTERB.
The specimen collected from Palau. ($\times 1/5$)

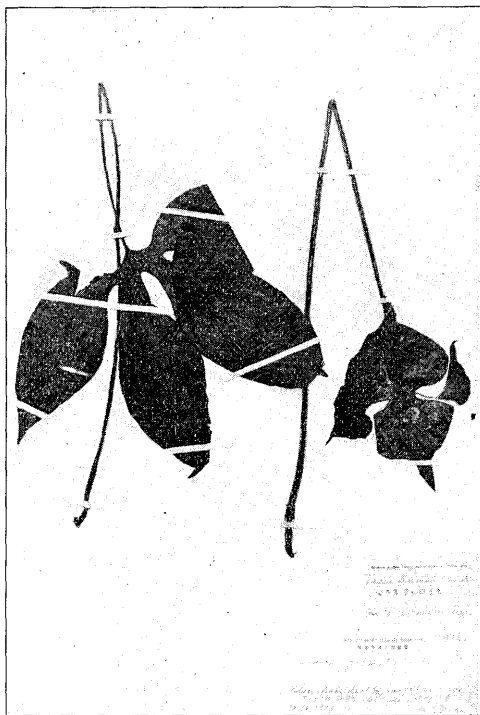


Fig. 7. *Tacca Rumphii* SCHAUER ($\times 1/5$)

TL Pfl.-fam. ed. 2. Bd. 15 a (1930) S. 540.

HAB. in the Caroline Islands. Endemic.

Zingiberaceæ

Alpinia carolinensis KOIDZ. in Bot. Mag. Tokyo XXXI. (1917) p. 232.

Languas carolinensis KANEHIRA, Fl. Micron. (1933) p. 412, & Enum. Micron. Pl. (1935) p. 292.

Languas babeldaobensis KANEHIRA in Trans. Nat. Hist. Soc. Formos XXV. (1935) p. 7, f. 9, & Enum. Micron. Pl. (1935) p. 292.

HAB. Caroline : Ponape (nos. 5735 ! 5793 ! 5822 ! 6021 ! 6033 !), Truk, Fefan (no. 8381 !) and Palau, Babeldaob (no. 7282 !)

DISTIB. *Type* locality is in Ponape and the species is confined to Caroline (Palau, Truk and Ponape).

NOTE. As the result of the comparative investigation on my collections from various localities I am inclined to reduce, because of no differential floral character among them, the name of *L. babeldaobensis* KANEHIRA to *Alpinia carolinensis* KOIDZ.

Vernacular name in Truk, "Ūtutu." The species is new to Truk.

Palau, Truk, Ponape ノ各島ニ産スル大形ノ *Alpinia* sp. ハ皆、同種デアル。
Alpinia carolinensis KOIDZ. ヲ採用スルコトニシタ。



Fig 8. *Alpinia carolinensis* KOIDZ in a primary forest at upper altitudes on the islet of Fefan in Truk.

Orehidaceæ

Corybas ponapensis (HOSOKAWA et FUKUYAMA) HOSOKAWA et FUKUYAMA, comb. nov.

Corysanthes ponapensis HOSOKAWA et FUKUYAMA in Trans. Nat. Hist. Soc. Formos. XXV. (1935) p. 17.

HAB. Caroline : Ponape (nos. 5699 ! 6010 !). Endemic.

細川、福山ガカツテ發表シタ *Corysanthes ponapensis* HOSOK. et FUKUY. ハソノ屬名トシテ *Corybas* ガ *Corysanthes* ヨリ以前ニ發表サレテキルノデ此處デ學名ノ訂正ヲスル。

Piperaceæ

Piper ponapense C. DC. in ENGL. Bot. Jahrb. LVI. (1921) S. 502.

HAB. Caroline : Truk, islet Tol (nos. 8269 ! 8292 ! 83271 !), islet Todiu (no. 8401 !), islet Trowasi (no. 8362 !).

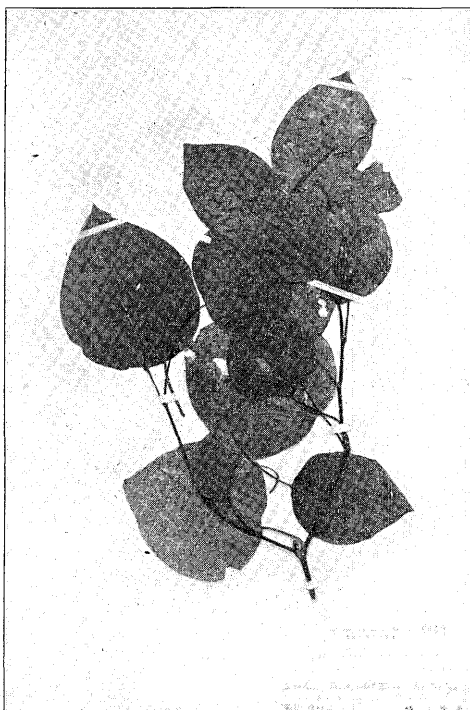


Fig. 9. *Piper trukense* Hosokawa, sp. nov.
Photograph of the type specimen ($\times 1/5$)

Amenta ♂ oppositifolia, densiflora, solitaria, pedunculata, pedunculo glabro ca. 1 cm longo, parte florifero ad 5 cm longo. Flos ♂ : bractea pelta glabra, suborbicularis, ca. 0.5 mm in diam., centro breviter pedicellata. Stamina 2 ad locum superiorem bractearum disposita, peltis bractearum paullo superantia. Anthera 3-valvis, 3-locularis, filamentis dilatatis.

HAB. Caroline : Truk, islet Wara, in a thicket at upper altitudes on Mt. Tratyau (T. Hosokawa, no. 8459 ! VIII. 16, 1936—Type in *Herb. Taihoku Imper. Univ.*)

This is a conspicuous species characterized with 3-valved and 3-locular two anthers in each ♀ flower, and, as have been mentioned, two anthers sit together on the upper side of its bract-pelta. Endemic.

Peperomia ponapensis C. DC. in ENGL. Bot. Jahrb. LVI. (1921) S. 504 ; Hosokawa, in Trans. Nat. Hist. Soc. XXV. (1935) p. 119.

The species is new to Truk, and it is hitherto known only from Ponape. Vernacular name in Truk, "Ereshi."

Piper trukense Hosokawa, sp. nov.

Planta dioica, scandens, ramulis glaberrimis striatis ad nodos paullo incrassatis, internodiis ca. 3-7 cm longis. Folia petiolata, petiolis glabris basi vaginantibus 2-3 cm longis ; lamina orbiculari-ovata, apice acuta, basi saepius inaequilateralis truncata vel subcordata, margine integra, chartacea, 5-plinervis, nervo centrali paullo supra basin trifido caetero utroque uno e basi soluto, utrinque glaberrima, laxe reticulata, ad 10 cm longa et

HAB. Caroline : Truk, islet Tol (nos. 8251 ! 8283 !), islet Wara (no. 8473 !), islet Trowasi (no. 8360 !).

I found this species on most islets in Truk, however, it has been found only on Ponape.

Peperomia pacificicola HOSOKAWA, nom. nov.

Peperomia pacifica HOSOKAWA, in Trans. Nat. Hist. Soc. Formos XXV. (1935) p. 119 [non *Peperomia pacifica* NAKAI in Bot. Mag. Tokyo XXXVI. (1922) p. 128].

HAB. Marianue : Saipan (nos. 6654 ! 6632 ! 6663 !). Endemic.

Peperomia yapensis C. DC. in l. c. S. 504 ; HOSOKAWA in l. c. p. 119.

HAB. Caroline : Palau (nos. 7082 ! 7101 !), Truk, islet Tol (no. 8305 !), Kusaie (no. 6460 !).

The type locality of this species is in Yap. Endemic in Carolinae.

Ulmaceæ

Celtis paniculata PLANCH. in Ann. Sc. Nat. Sér. III.-10 (1848) p. 305, & in DC. Prodr. XVII. (1873) p. 182 ; C. LAUTERB. in ENGL. Bot. Jahrb. L (1913) S. 310 ; KANEHIRA in Bot. Mag. Tokyo XLVI, (1931) p. 275, Fl. Micron. (1933) p. 82, f, 14, & Enum. Micron. Pl. (1935) p. 306.

HAB. Caroline : Truk, islet Wara, in a swamay forest near a mangrove swamp (T. HOSOKAWA, no. 8447 ! VIII. 15, 1936).

DISTRIB. The species is new to Truk, however, there have been found on N.O. Australia, New Guinea, Timor-laut, Norfolk, Tahiti, New Caledonia, Yap and Palau. *Vernacular* name in Truk, "Pukomon."

Moraceæ

Ficus mariannensis MERR. in Philipp. Journ. Sci. IX. (1914) Bot. p. 73.

HAB. Marianne : Tinian (no. 7701 !).

The species is new to Tinian and there have been found only on Guam.

Urticaceæ

Elatostema calcareum MERR. in Philipp. Journ. Sci. IX. (1914) Bot. p. 77 ; KANEHIRA Enum. Micron. Pl. (1935) p. 309.

HAB. Marianne : Guam (R. C. MCGREGOR, no. 432), Rota (T. HOSOKAWA, no. 7612 !), Saipan (T. HOSOKAWA, nos. 6703 ! 6664 !).

Caroline : Palau (T. HOSOKAWA, nos. 7524 ! 7421 !), Truk, islet Tol (T. Hoso-

KAWA, nos. 8253 ! 8281 !).

DISTRIB. The species is new to Saipan, Palau and Truk. It occurs on wet places in a primary forest and is confined to Marianne and Caroline.

Balanophoraceæ*

Balanophora fungosa FORST. Char. Gen. (1776) p. 99, t. 50; EICHLER in DC. Prodr. XVII. (1873) p. 145; BENTH. Fl. Austral. VI. (1873) p. 232; ENGL. & PRANTL Nat. Pfl.-fam. III.-1. (1889) S. 261, fig. 166, A. H.; MAKINO in Bot. Mag. Tokyo XXI. (1907) p. 29; MERR. Enum. Philip. Pl. II. (1923) p. 118.

HAB. Caroline: Truk, islet Wata (no. 8431 !), islet Tol (nos. 8'95 ! 8336 !).

DISTRIB. Australia, Melanesia, New Guinea, Philippines and Liukiu. Vernacular name in Truk, (islet Tol) 'Torupo.'

The species new to Truk.

var. **mariannæ** (HOSOKAWA) HOSOKAWA, comb. nov.

Balanophora mariannæ HOSOKAWA, in Journ. Soc. Trop. Agric. VI. (1934) p. 572.

HAB. Marianne: Sarigan (no. 7990 !), Saipan and Alamagan ?

Polygonaceæ

Polygonum barbatum L. Sp. Pl. I. (1753) p. 362; MERR. in Philip. Journ. Sci. IX. (1914) Bot. p. 80; STEWARD in Contrib. Gray Herb. LXXXVIII. (1930) p. 52.

HAB. Marianne: Guam. Caroline: Palau (nos. 7083 ! 7086 !), Truk, islet Udot (no. 8351 !).

DISTRIB. The tropical parts of Asia, Malay Archipelago, New Guinea, Micronesia. The species new to Truk and Palau.

Nyctaginaceæ

Pisonia umbellifera SEEM. in Bonplandia X. (1862) p. 154; KANEHIRA Enum. Micron. Pl. (1935) p. 316.

HAB. Caroline; Truk, islet Wata (no. 8426 !).

The species is new to Truk and ranging over the tropical countries from

* **Balaniella papuana** (SCHLTR) HOSOKAWA, comb. nov.

Balanophora papuana SCHLTR. in ENGL. Bot. Jahrb. L. (1913) S. 68.

H. B. North-eastern part of New Guinea.

Malay Archipelago to Melanesia, New Guinea, Australia northwards to Formosa.

Portulacaceæ

Portulaca tuberosa ROXB. Fl. Ind. II. (1832) p. 464; W. T. THISELTON DYER in Hook. f. Fl. Brit. Ind. I. (1875) p. 247; KOORD. Exkurs.-Fl. Java II. (1912) S. 209.

HAB. Marianne; Saipan (R. KANEHIRA, no. 1012 !), Tinian (T. HOSOKAWA, no. 7785 !). Caroline; Palau (T. HOSOKAWA, no. 7076 !), Truk (T. HOSOKAWA, no. 8316 !), Ponape (T. HOSOKAWA, no. 6114).

DISTRIB. From India and Ceylon to Java.

This species, in Micronesia, occurs on rocky places by the sea-shore, and is new to Micronesia.

相 模 灣 産 浮 游 生 物 (其 二)

室 伏 朋 治

T. MUROBUSE: Phytoplankton from Sagami Bay (II)

Chaetoceras distans CL. (Fig. 5-4; Fig. 6-5)

細胞ハ高サ大ニシテ柱狀ヲナスカ或ハ横ニ矩形ヲナス、後者ノ場合殻隙ハ細胞ノ高サヨリモ大ナリ、蓋面凹形ナルモ中央部僅カニ膨ル角ハ四隅ヨリ出デ僅少ノ間鎖軸ニ平行ナルモ後隣接細胞ノモノト交叉シ各方面ニ出ヅル。直径 10—27 μ 。

Chaetoceras danicus CLEVE. (Fig. 4-6)

細胞ハ多クノ場合常ニ單獨ナルモ時トシテ數個集リテ連鎖ヲ成ス、廣側面矩形ヲナシ蓋面殆ンド平坦、殻帶明カニシテ境界縊レ角ハ蓋面ヨリ 2 細胞ノ長軸ニ對シテ直角ヲナシテ出ヅ。直径 8—20 μ 。

Chaetoceras laeve LEUD-FORTM. (Fig. 4-5)

細胞ハ密ニ相隣接シ殻隙ナク眞直ナル連鎖ヲナス、中間ノ太キ 1 對ノ角ハ基部太ク鎖軸ニ對シテ直角ニ出ヅルモ後中頃ヨリ直角ニ曲リテ細マリ略平行トナル、他ノ細キ刺モ同様ナ方向ニ出ヅ。直径 10 μ 内外。